# *Hymenopappus carrii* (Asteraceae: Helenieae), a new species from the gulf coastal prairie of south-central Texas

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## ABSTRACT

A novel species, **Hymenopappus carrii**, is described from the coastal region of south-central Texas. It is closely related to **H. artemisiifolius**, but amply distinct in both vegetative and floral features.
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**KEY WORDS**: **Asteraceae, Helenieae**, *Hymenopappus*, Texas

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The genus **Hymenopappus** was selected as a monographic study for my doctoral thesis (Turner 1956), this under the aegis of the late Marion Ownbey of Washington State University. The only addition to the Texas taxa since that publication has been **H. carrizoanus** (Turner, 1989). Gandhi & Thomas (Sida, Bot. Misc. 4: 113. 1989), however, reduced **H. artemisiifolius** to varietal status under their concept of **H. scabiosaeus** along with var. **riograndensis,** a view to which I do not subscribe, the two specific taxa being sympatric over a large portion of central Texas, showing little evidence of intergradation, except perhaps for the occasional hybridization.

The following novelty adds an additional species to the State's flora:

**Hymenopappus carrii** B.L. Turner, **sp. nov.**

**Perennial (?) herbs**, 30-45 cm high. **Roots,** slender, tap-rooted, but seemingly perennial. **Leaves** pinnately compound, forming a basal rosette, the blades 6-15 cm long, 3-5 cm wide, the ultimate divisions 2-3 mm wide, glabrous (on the type) or sparsely appressed-pubescent beneath (on the paratype; not at all tomentose-pubescent as in **H. artemisiifolius**); stem leaves 3-7, much-reduced upwards. **Capitulescence** a terminal cymose panicle of 10-20 heads ca 10 cm high, ca 6-8 cm across, the ultimate peduncles 1-2 cm long. **Heads** ca 1m high and as wide; involucral bracts 8-12, 1-2 seriate, obovate, 4-6 mm long, their apices broadly rounded with white-scarious apices 1-2 mm wide. **Receptacles** plane, 2-3 mm across. **Florets** 20-30 per head; corollas white, tubes ca 3 mm long, minutely glandular-pubescent; throats ca 1 mm long, glabrous or nearly so; lobes 5, reflexed, glabrous, ca 1mm long and as wide. **Stamens** with yellow anthers ca 2 mm long, their apical appendages glandular. **Achenes** 4-sided, ca 3 mm long, 1 mm wide, pubescent throughout with minute ciliate hairs mostly 0.2 mm long or less; pappus a ring of minute membranous scales 0.1-0.2 mm high.

HOLOTYPE: **TEXAS. MATAGORDA CO.:** "rare on preserve (at least in S half), noted only in salty prairie grassland on somewhat tight slightly saline clay on +/- level topography about 1 m above salt marsh along Mad Island Lake, !.7 airmiles NE of HQ of Mad Island Marsh Preserve," 28 39 45.6 N, 96 05 23.7 W, elev. 2-3 m, 20 Apr 2004, *W.R. Carr 23034* (TEX).

ADDITIONAL SPECIMEN EXAMINED: **TEXAS. REFUGIO CO.:** "coastal prairie, off hwy. 35 at intersection of 774," 11 Apr 1963, *C.L. Lundell & A.A. Lundell 17388* (LL).

I first came to know this taxon by the Refugio Co. collection cited above, thinking I might give it varietal status, but instead included it within my concept (at the time) of **H. artemisiifolius** var.

**riograndensis**. The subsequent collection by Carr strongly suggests that there is a population of nearly glabrous plants (cf. Fig. 2) having markedly pinnatifid leaves and minutely ciliate achenes with reduced pappus scales that occur only along the tidal slopes of south-central Texas along the Gulf of Mexico (Matagorda and Refugio counties). The roots of both collections differ markedly from those **H. artemisiifolius**, the latter being enlarged and clearly tap-rooted, as opposed to the very slender, branched roots of the **H. carrii**. It is likely that additional populations of the novelty will be found in similar habitats of the area concerned.

It is a pleasure to name the species for my long time colleague and extraordinary botanist, William R. Carr, collector of the Type specimen.

The following key to the Texas taxa of **Hymenopappus** should prove helpful:

1. Ray florets white, prominent; trans-Pecos, Guadalupe Mountains...**H. biennis**
1. Ray florets absent...(**2**)

2. Perennial plants with woody or lignescent rootstocks. ..... **H. filifolius**
2. Annual, biennial or weakly perennial plants, with herbaceous taproots...(**3**)

3. Corollas yellow. ..... **H. flavescens**
3. Corollas white, creamy-white or purplish-tinged...(**4**)

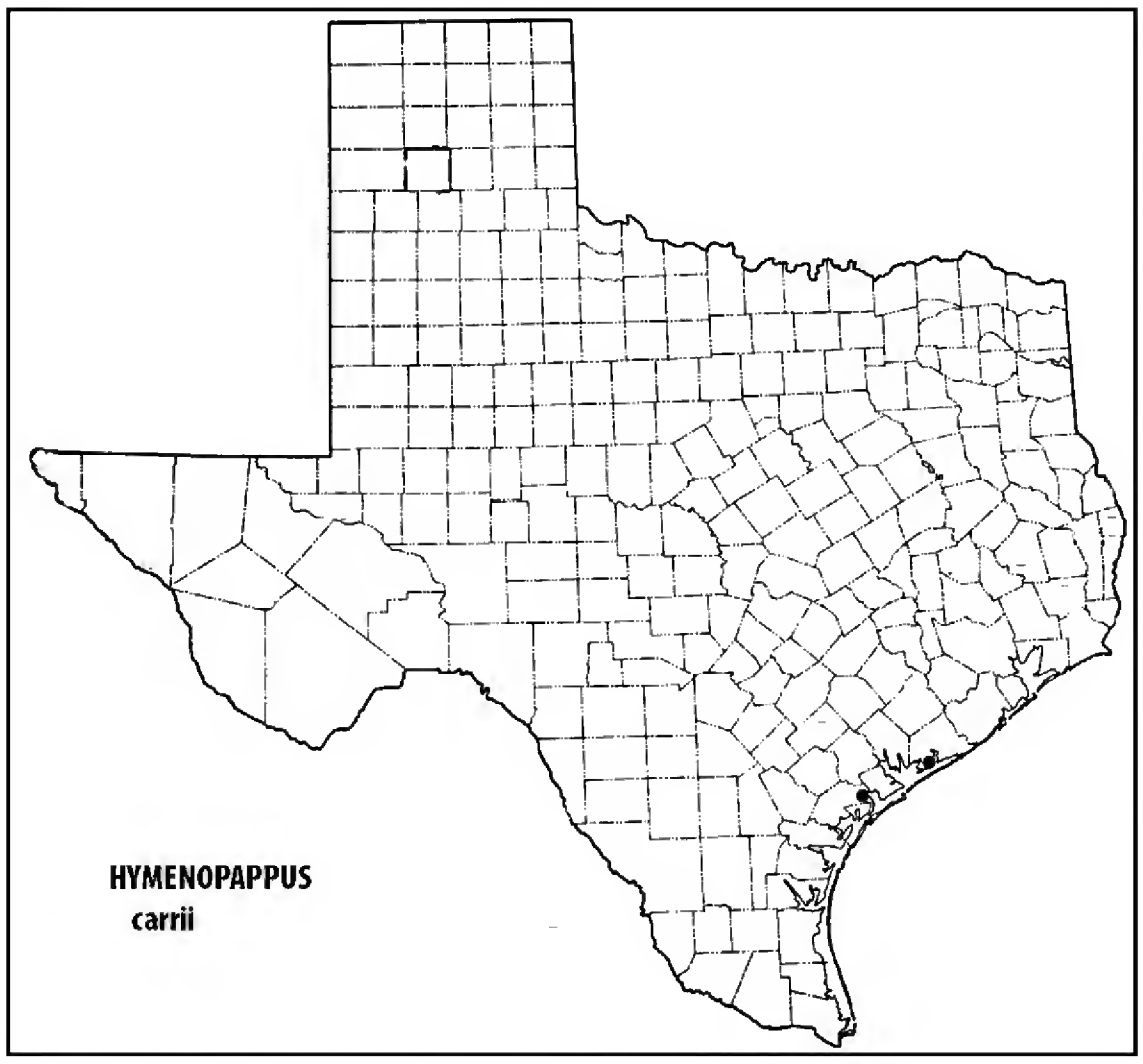
4. Leaves entire to merely lobed or dissected, the ultimate divisions mostly 2-6 mm wide...(**6**)
4. Leaves dissected with linear divisions, the latter mostly 0.5-1.5 mm wide...(**5**)

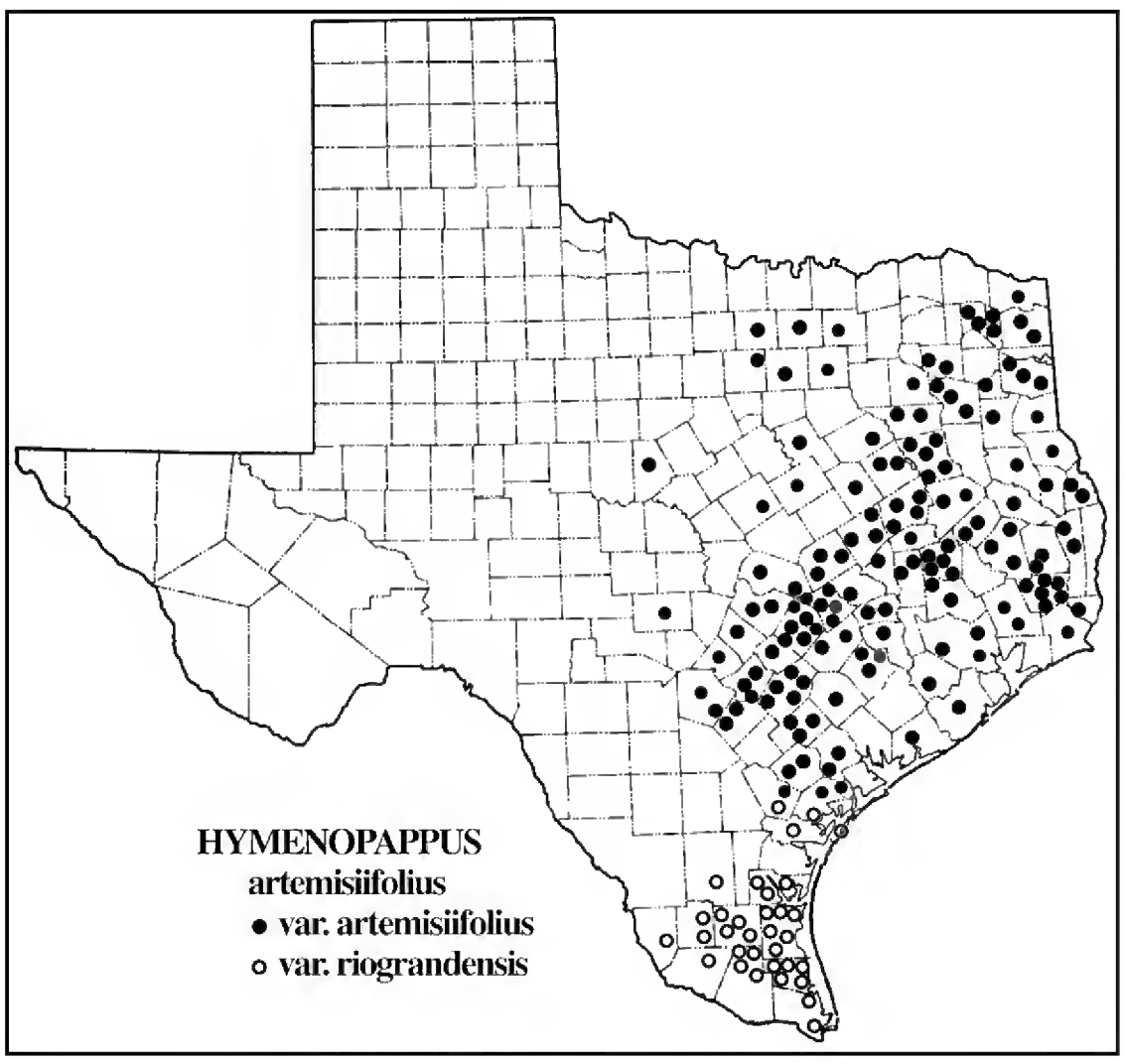
5. Stems about equally leafy throughout, the leaves not much reduced upwards; involucres tomentulose throughout; corolla throat campanulate.....**H. carrizoanus**
5. Stems mostly leafy below, the leaves much reduced upwards; involucres variously pubescent to glabrate, corolla throat campanulate....**H. tenuifolius**

6. Under surfaces of leaves glabrous or nearly so; pappus scales 0.1-0.2 mm long; saline sandy soils along Gulf of Mexico .....**H. carrii**
6. Under surfaces of leaves densely velvety white-pubescent; pappus scales 0.4-2.0 mm long (rarely not); mostly interior plants of central and southern Texas...(**7**)

7. Leaves of basal rosette pinnately to bipinnately dissected; florets with white corollas; mostly clayey soils.....**H. scabiosaeus**
7. Leaves of basal rosette simple to deeply lobed; floret corollas variously rosy-vinaceous or purplish-colored; mostly sandy soils...**H. artemisiifolius**

[*H. scabiosaeus* is represented in Texas by the var. *corymbosus*; *H. artemisiifolius* by var. *artemisiifolius* and var. *riograndensis*, as shown in the maps below, these taken from my latest, up-dated, Atlas of the Vascular Plants of Texas (Turner, 2003)]


HYMENOPAPPUS
carrii


HYMENOPAPPUS
artemisiifolius
● var. artemisiifolius
○ var. riograndensis

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**LITERATURE CITED**

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**Fig. 1**. Holotype of *Hymenopappus carrii*.

**Fig. 2.** Capitulescence (top photo) and basal rosette (lower photo) of *H. carrii* (from the Type itself, just before pressing).